RAW SEQUENCE LISTING   DATE: 03/02/2001
PATENT APPLICATION: US/09/548,449   TIME: 09:03:50

Input Set : A:\917501~1.txt
Output Set: N:\CRF3\03022001\I548449.raw

```
 4 <110> APPLICANT: Norris et al.
 6 <120> TITLE OF INVENTION: TISSUE-SPECIFIC AND PATHOGEN-SPECIFIC TOXIC AGENTS
 7       AND RIBOZYMES
 9 <130> FILE REFERENCE: 9175-016-999
11 <140> CURRENT APPLICATION NUMBER: 09/548,449
12 <141> CURRENT FILING DATE: 2000-04-13
14 <150> PRIOR APPLICATION NUMBER: 09/291,904
15 <151> PRIOR FILING DATE: 1999-04-14
17 <160> NUMBER OF SEQ ID NOS: 14
19 <170> SOFTWARE: FastSEQ for Windows Version 3.0
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 66
23 <212> TYPE: DNA
24 <213> ORGANISM: Artificial Sequence
26 <220> FEATURE:
27 <223> OTHER INFORMATION: LEASH1 promoter
29 <400> SEQUENCE: 1
30  gatcctcaga aaattatttt aaatttccaa ttgacattgt gagcggataa caatataatg    60
31  tgtgga                                                               66
33 <210> SEQ ID NO: 2
34 <211> LENGTH: 74
35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Modified rrnb promoter
41 <400> SEQUENCE: 2
42  agaaagcaaa aataaatgct tgacactgta gcgggaaggc gtataatgga attgtgagcg    60
43  gataacaatt caca                                                      74
45 <210> SEQ ID NO: 3
46 <211> LENGTH: 492
47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
51 <223> OTHER INFORMATION: ANR promoter
53 <400> SEQUENCE: 3
54  actcgcggat catcttcacc atcggccgca actcctgcgg gatatcctcg tcctcctcct    60
55  ccaccggcac ccccatggta gcggccagct cgcgccctgc ctgggaaagc tgtacatgct   120
56  gatcggcggc gtcggtgccg gcggccgggt cttccgcctg ctcggcggtg ccggtccgtg   180
57  cggccttggc gtccgcggcg cgcgcgatg agggcggcac ctgggtggtg atccagccac     240
58  tgagggtcaa cattccagtc actccgggaa aaatggaatt cttccattgg atcggcccac   300
59  gcgtcgcgaa cttgagcccc cttttcgtcg ccccttgaca gggtgcgaca ggtagtcgca   360
60  gttgtttgac gcaagtcact gattggaaac gccatcggcc tgtcagaaat ggtcgttgcc   420
61  agacctatgg ctggcacccg catcgcggct gcgttaccct tactcctgtt gtgcctttaa   480
62  cctagcaagg ac                                                       492
64 <210> SEQ ID NO: 4
65 <211> LENGTH: 1113
66 <212> TYPE: DNA
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```
 67 <213> ORGANISM: Artificial Sequence
 69 <220> FEATURE:
 70 <223> OTHER INFORMATION: ProC promoter
 72 <400> SEQUENCE: 4
 73  aattcctcga agtccttgcg ctgcttgtcg ttcatgatgt cgtagatcag cgcatgcacc      60
 74  tgcttgtgtt ccagcggtgg caggttgatc cggcgtacat cgccatccac ccggatcatg     120
 75  ggtggcaggc cggcggagag gtgcaggtcc gaagcgccct gtttggcact gaaggcgagc     180
 76  agctcggtaa tatccatggg actccccaat tacaagcaag caggtagaat gccgccaaag     240
 77  ccgccgtctc ggacaaggaa aacaccggat gagccagggt gcttccagga cacgcgtggt     300
 78  gtcctgcgcc agacgcggaa cctcgacact ggaacaggaa gatggccatc gaggccggcg     360
 79  gtttcgaggg cgtcgagccg acgccgaccg cacttccata gggcgcaggt aatgtccacg     420
 80  atagcagaga atattgcaaa ggttgccgcg cgcatccgtg aggcagcgca agctgcgggg     480
 81  cgcgatccgg ccacggtcgg cctgctcgcc gtgagcaaga ccaagcccgc cgccgcggtg     540
 82  cgcgaggcgc acgccgccgg ccttcgcgac ttcggcgaaa actacctgca ggaggccctc     600
 83  ggcaagcagg ccgaactggc cgacctgccc ttgaactggc acttcatcgg ccccatccag     660
 84  tcgaacaaga cgcggcccat cgccgagcat ttccagtggg tgcactcggt ggaccggttg     720
 85  aagatcgcgc agcgcctgtc ggagcaacgc ccggccgggc tgccgcccct gaatgtctgc     780
 86  ctgcaggtca acgtcagcgg cgaagccagc aagtccggct gcgcccccga ggacctgccg     840
 87  gccctggccg aggccgtgaa gcaactgccc aacctccgat tgcgtggcct gatggccatc     900
 88  cccgaaccca ccgccgaacg cgccgcgcaa cacgccgcgt tcgcccgcct gcgcgaactg     960
 89  ctgctggacc tgaaccttgg cctggacacc ctgtccatgg gcatgagcga cgacctcgag    1020
 90  gcagccatcg gcgaaggtgc gacctgggtc cgcatcggta ccgccctgtt cggcgcccgc    1080
 91  gactacggcg cgccggcttc ttgaatgaat ccc                                 1113
 93 <210> SEQ ID NO: 5
 94 <211> LENGTH: 66
 95 <212> TYPE: DNA
 96 <213> ORGANISM: Artificial Sequence
 98 <220> FEATURE:
 99 <223> OTHER INFORMATION: ARC promoter
101 <400> SEQUENCE: 5
102  ctagagctat tgatgtggat caacattgtc cactagccgc tgccgcctaa tctccagaat      60
103  tgtgag                                                                 66
105 <210> SEQ ID NO: 6
106 <211> LENGTH: 2120
107 <212> TYPE: DNA
108 <213> ORGANISM: Staphylococcus aureus
110 <400> SEQUENCE: 6
111  ttatttagca ggaataatta gccagattat cgagggagtt ccagggcaat ccaaacattg      60
112  ttatatatgc atttataaaa ttttcaagat aatttattat tcataccctt gccctttgtt     120
113  tcaaaattat gccctttttt tgcccttgga aacaaccaca ctcctaaatt aataggtggt     180
114  gtggtttgat catttataat ataacataaa aacaaccacc cagtaactag tatgagtggc     240
115  gtagcgacta taacaactct atgttatcaa gatatatgta tatgagtgat gacaaggaag     300
116  atgtctcctg tgagaccaac agccagatat atggcctctt gccgggctat atagttcact     360
117  cctactatat acacatgtaa ttataacata aaaaaataga caagtaccga agtacctgcc     420
118  taaataacaa caagattaac atgtgaataa tggaaataaa aagtcagccc gaaggctaac     480
119  ttacgaatag atgaaaattt gaacacattg ctgtgtctaa aatgattata gcataaataa     540
120  cgaatatttc cagctcgaaa ttaatatatt gtaataataa tattttatat ctttgttaat     600
121  aattatttaa ttgatttaca taaataataa ttgtaaaatt aatttgtaat cgattgcaaa     660
122  taagttatag gagaaaataa aatgaataaa aaactattaa caaaaacatt gatagcaagt     720
```

Input Set : A:\917501-1.txt
Output Set: N:\CRF3\03022001\I548449.raw

```
123  gctttagttt taacaacagt aggttcaggt tttcattctt cttcaaatta taatggtatt    780
124  aataacgttg aaaaagctga gcaaacgaca gataacgcat tgtggaaaaa tgtaagagac    840
125  gctttaaaag acgcgaatat tatcgataaa acagataatg aaaatgtcaa ggttacgtat    900
126  aaaatagaaa atggtggaga aaataccata gaaggaacag ttaatttaga aaatattagt    960
127  acttcaaaca atcctaaaat aaaccctcaa aatgttacaa aaattaatat aactagaaaa   1020
128  aatccgaact accctaatat tgatgctaat aatacatgga aaaaattacc agaaaaattg   1080
129  aaagaaaaaa atatagtgga acaacggcga caatgtttca atcttaagta cagaccctaa   1140
130  agatgagact gtattcggta aagtaggaga agataaatca aacgtaagca atagatacat   1200
131  caatcctaaa gatataaatg aattcaaatc actaaaaata cttttttccg aggcagatta   1260
132  ctcctgcctc tttctttgaa cagtgatatc ttctgatcta tgtaacactc aattacttca   1320
133  gattctttac ctttaacttc ctttaattca tttctctcta tctcctcaaa aagttgtgct   1380
134  ttttgatttg tgattggagt tgggcgtttt ttcatcgcgt tgtttcaatt ccttttttaag   1440
135  gtattctaat tctcttctag tcatatcaat tgttttttta cttctcacct ttagtgaaat   1500
136  actcttatcc tttctcttct tgcgttaatg ttgctaatta gtataaaata catgcgccca   1560
137  tatattccaa tggtaggaca tttaattctg gattttcagc tattttcata aatctattat   1620
138  ctgataattt gcttaatcca attttcaagc catagcctaa attccccatc cactaagtca   1680
139  ttttgtttca tatggtttta atctacggcc aatctcaaag atagattgac cagcgatgtt   1740
140  taaagtcata tttcacggat ccacatttac gataaacata tctagttaca caatattatc   1800
141  ccttactgca acacaggacg tttctcagcg taaaaacac cactagaaag tgactttaaa   1860
142  gaatataact aattcaaact tatattaatt aatattcttt aaatgaccac tcacactttg   1920
143  ttttttgcta tttgtaactt taaaatgttg tttgaaatct atattttttt gatatagctc   1980
144  cctatgtaac aaacaatttt taattaatat atatttaaac aagtcaattt agagatcggt   2040
145  taattcgatt catttaaata atatttatac attctatatg taaacgttta cacatttgaa   2100
146  gtaaggagaa ttaaaaatga                                                2120
148  <210> SEQ ID NO: 7
149  <211> LENGTH: 177
150  <212> TYPE: DNA
151  <213> ORGANISM: Artificial Sequence
153  <220> FEATURE:
154  <223> OTHER INFORMATION: P1 pac site
156  <221> NAME/KEY: CDS
157  <222> LOCATION: (1)...(177)
159  <400> SEQUENCE: 7
160  cca cta aaa agc atg atc att gat cac tct aat gat caa cat gca ggt      48
161  Pro Leu Lys Ser Met Ile Ile Asp His Ser Asn Asp Gln His Ala Gly
162  1               5                   10                  15
164  gat cac att gcg gct gaa ata gcg gaa aaa caa aga gtt aat gcc gtt     96
165  Asp His Ile Ala Ala Glu Ile Ala Glu Lys Gln Arg Val Asn Ala Val
166              20                  25                  30
168  gtc agt gcc gca gtc gag aat gcg aag cgc caa aat aag cgc ata aat    144
169  Val Ser Ala Ala Val Glu Asn Ala Lys Arg Gln Asn Lys Arg Ile Asn
170              35                  40                  45
172  gat cgt tca gat gat cat gac gtg atc acc cgc                        177
173  Asp Arg Ser Asp Asp His Asp Val Ile Thr Arg
174          50                  55
177  <210> SEQ ID NO: 8
178  <211> LENGTH: 13
179  <212> TYPE: DNA
180  <213> ORGANISM: Artificial Sequence
```

```
182 <220> FEATURE:
183 <223> OTHER INFORMATION: IHF binding site
185 <221> NAME/KEY: modified_base
186 <222> LOCATION: all "n" positions
187 <223> OTHER INFORMATION: n=a, c, g, or t
189 <400> SEQUENCE: 8
190 aatcaannan tta                                            13
193 <210> SEQ ID NO: 9
194 <211> LENGTH: 45
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: DicF1 molecule
201 <400> SEQUENCE: 9
202  caggcgacag gtatagtttc tctccgattt gtgcctgtcg cctgc         45
204 <210> SEQ ID NO: 10
205 <211> LENGTH: 172
206 <212> TYPE: RNA
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: ribozyme
212 <221> NAME/KEY: modified_base
213 <222> LOCATION: all "n" positions
214 <223> OTHER INFORMATION: n=a, c, g, or u
216 <400> SEQUENCE: 10
217  gcggccgcuc gagcucugau gaguccguga ggacgaaacg guacccggua ccgucagcuc   60
218  gagaucucun nnnnnncuga ugaguccgug aggacgaaan nnnnagaucc gucgacggau  120
219  cuagauccgu ccugaugagu ccgugaggac gaaacggauc ugcagcggcc gc         172
221 <210> SEQ ID NO: 11
222 <211> LENGTH: 242
223 <212> TYPE: RNA
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: ribozyme
229 <221> NAME/KEY: modified_base
230 <222> LOCATION: all "n" positions
231 <223> OTHER INFORMATION: n=a, c, g, or u
233 <400> SEQUENCE: 11
234  aagcuuugga acccugauga guccgugagg acgaaacgau gacauucugc ugaccagauu   60
235  cacggucagc agaaugucau cgucgguucc agauccnnnn nncugaugag uccgugagga  120
236  cgaaannnnn nnnngcaagg gucugcgcaa cgacgacgau gagguaccac aucgucgucg  180
237  uugcgcacug augaggccgu gaggccgaaa cccuugacgc guuccaugc ggccgcucua  240
238  ga                                                        242
240 <210> SEQ ID NO: 12
241 <211> LENGTH: 14
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
245 <220> FEATURE:
246 <223> OTHER INFORMATION: consensus ribosome binding site
```

RAW SEQUENCE LISTING   DATE: 03/02/2001
PATENT APPLICATION: US/09/548,449   TIME: 09:03:50

Input Set : A:\917501-1.txt
Output Set: N:\CRF3\03022001\I548449.raw

```
 248 <221> NAME/KEY: modified_base
 249 <222> LOCATION: (8)...(11)
 250 <223> OTHER INFORMATION: n=a, c, g, or t
 252 <400> SEQUENCE: 12
 253   ggaggtgnnn natg                                          14
 255 <210> SEQ ID NO: 13
 256 <211> LENGTH: 16
 257 <212> TYPE: DNA
 258 <213> ORGANISM: Artificial Sequence
 260 <220> FEATURE:
 261 <223> OTHER INFORMATION: promoter
 263 <400> SEQUENCE: 13
 264   gagtcgacgg atccgg                                        16
 266 <210> SEQ ID NO: 14
 267 <211> LENGTH: 17
 268 <212> TYPE: DNA
 269 <213> ORGANISM: Artificial Sequence
 271 <220> FEATURE:
 272 <223> OTHER INFORMATION: promoter
 274 <400> SEQUENCE: 14
 275   tggggtggg ggtgggg                                        17
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VERIFICATION SUMMARY   DATE: 03/02/2001
PATENT APPLICATION: US/09/548,449   TIME: 09:03:51

Input Set : A:\917501~1.txt
Output Set: N:\CRF3\03022001\I548449.raw

```
L:190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
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